

STATE OF HAWAII  
STATE PROCUREMENT OFFICE  
HONOLULU, HAWAII

Legal Ad Date: May 15, 1998

INVITATION FOR BIDS

No. IFB-98-174-O

SEALED BIDS

FOR

FURNISHING AND DELIVERY

DIGITAL ROUTING SYSTEM  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS  
HAWAII PUBLIC BROADCASTING AUTHORITY

will be received up to and opened at 2:00 p.m. (HST)

on

June 5, 1998

in the State Procurement Office, Kalanimoku Building, 1151 Punchbowl  
Street, Room 416, Honolulu, Hawaii 96813.

Questions relating to this bid solicitation may be directed to Mrs.  
Corinne Higa, telephone (808) 586-0568, facsimile (808) 586-0570.

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ROBERT J. GOVERNS, CPPB  
Procurement Officer

06/03/96

DIGITAL ROUTING SYSTEM  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS  
HAWAII PUBLIC BROADCASTING AUTHORITY  
IFB-98-174-O

Procurement Officer  
State Procurement Office  
State of Hawaii  
Honolulu, Hawaii 96813

Dear Sir:

The undersigned has carefully read and understands the terms and conditions specified in the Specifications and Special Provisions attached hereto, and in the General Terms and Conditions dated September 1, 1995 by reference made a part hereof and available upon request; and hereby submits the following offer to perform the work specified herein, all in accordance with the true intent and meaning thereof.

The undersigned further understands and agrees that by submitting this offer, 1) he/she is declaring his/her offer is not in violation of Chapter 84, Hawaii Revised Statutes, concerning prohibited State contracts, and 2) he/she is certifying that the price(s) submitted was (were) independently arrived at without collusion.

Date: \_\_\_\_\_

Respectfully submitted,

Telephone No.: \_\_\_\_\_

Fax No.: \_\_\_\_\_

\_\_\_\_\_  
Exact Legal Name of Offeror

Payment address, if other than  
street address at right:

\_\_\_\_\_  
Authorized Signature (Original)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Title

Hawaii General Excise Tax Lic.  
I.D. No.: \_\_\_\_\_

\_\_\_\_\_  
Street Address

Social Sec. or Federal I.D. No.: \_\_\_\_\_

\_\_\_\_\_  
City, State, Zip Code

If offeror shown above is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the contract, if awarded, will be executed:

\_\_\_\_\_

Offeror is: \_\_\_ Individual \_\_\_ Partnership \_\_\_ Corporation \_\_\_ Joint Venture

State of incorporation: Hawaii \_\_\_\_\_ \*Other \_\_\_\_\_

\*If "other", is corporate seal available in Hawaii? \_\_\_ Yes \_\_\_ No

The following offer is hereby submitted for a Digital Routing System for the Hawaii Public Broadcasting Authority, as specified herein:

<u>Item No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Brand Name &amp; Number(s)</u>	<u>Unit Bid Price</u>	<u>Total Bid Price</u>
1.	7000 SMS-DV Series or equal Hi-Density Serial Digital Video Signal Management System; 128 x 128 Frame; populated to 64 x 64; redundant power supply (SMS-PS1200 or equal); back-up node controller module (SMS-NC or equal); redundant power supply for the control frame; cooling fan assembly (SMS 6FAN or equal)	1 only	_____		\$_____
2.	128 x 128 digital audio frame; populated with 32 x 32 digital audio crosspoint cards and 32 x32 analog audio crosspoint boards; redundant power supply (SMS-PS1200 or equal); back-up node controller module (SMS-NC or equal); cooling fan assembly (SMS-6FAN or equal)	1 only	_____		_____
3.	64 x 64 data management frame; populated to 32 x 32; redundant power supply (SMS-PS1200 or equal); back-up node controller module (SMS-NC or equal)	1 only	_____		_____
4.	Horizon Node Controller to separately control one (1) video and three (3) audio levels of an existing Horizon HX-64 Routing System (SMS-HX-NC or equal)	4 each	_____	\$_____	_____
5.	Graphical User Interface (SMS-PCDE or equal)	1 only	_____		_____
6.	Programmable Multibus 4 Control Panel (SMS-MB4 Control Panel or equal)	5 each	_____	_____	_____
7.	Simple Control Panel (SMS-SCP or equal)	30 each	_____	_____	_____
8.	Universal XY Control Panel (SMS-UCP-XY or equal)	15 each	_____	_____	_____
<b>Total Sum Bid:</b>					<b>\$_____</b>

Offeror \_\_\_\_\_

## SPECIFICATIONS

### 1.0 SCOPE

The purpose of these specifications is to define requirements for the procurement and final acceptance of a television broadcast audio video and control routing system.

### 2.0 GENERAL DESCRIPTION

#### 2.1 INTERFACE SIGNAL AND POWER

- 2.1.1 Video input/output frame connectors shall be of true 75-ohm BNC connectors compatible with user-supplied 50-ohm and/or 75-ohm BNC'S.
- 2.1.2 Audio input/output connectors shall be by means of compression type terminal strip. Removable mating connectors shall be supplied with the system.
- 2.1.3 Power Supplies/Operating Voltage: Power supplies are voltage selectable (95-130VAC or 200-250VAC) and are capable of running at 47-63 Hz. Power consumption in a 256 x 128 video matrix, shall be 1KW typical. Power consumption in a 128 x 64 audio matrix shall be 300 watts typical.
- 2.1.4 Video inputs shall be 75 Ohms internally terminated.
- 2.1.5 System level shall be 1 Vp-p nominal, 3 Vp-p maximum.
- 2.1.6 The sync pulses input shall be capable of accepting a -150mv to -8v sync to lock the system trigger pulse generator to plant sync.
- 2.1.7 Audio inputs shall be balanced transformerless with an impedance of 64K for up to 32 outputs, 16K for up to 128 outputs, and 8k for up to 256 outputs. The system shall accommodate a maximum signal level of +24dBu.
- 2.1.8 The system shall have an adjustable gain range of +/-1.5dB.
- 2.1.9 Audio outputs shall be balanced transformerless with a impedance of <75 ohms. Output stages shall be short-circuit protected.
- 2.1.10 Remote control devices shall interface to the system via a high speed bi-directional command bus. Physical connection shall be via coaxial cable terminated in 75 Ohm BNC connectors.

#### 2.2 PHYSICAL SIZE-SHAPE

Matrix physical size shall be according to frame type and ultimate capacity, and shall vary depending on main controller placement and use of optional convection sets.

##### Classic Analog / Digital Video systems

64 x	64V Video	12RU
128 x	64V Video	21RU
128 x	96V Video	27RU
128 x	128V Video	33RU

### **DV Series Digital systems**

64 x 64 Video	6RU
128 x 128 Video	12RU
256 x 128 Video	18RU

### **HD Series 1.485G Digital Video**

32 x 32 Video	4RU
64 x 64A Audio	6RU
128 x 64A Audio	6RU
128 x 128A Audio	12RU

Controller Frame	6RU
All Option Frames	6RU

## **3.0 QUALITY**

### **3.1 DESIGN**

- 3.1.1 The equipment shall be designed in accordance with good engineering practice and shall provide a level of performance consistent with the state of the art.
- 3.1.2 Where there is a clearly demonstratable benefit (e.g. improved performance, increased packaging density, better serviceability), the equipment designs may employ specially designed components. When such parts are employed, the manufacturer shall offer a spare parts kit option with the equipment.
- 3.1.3 Where practical, integrated circuits shall be mounted in sockets for ease of replacement.
- 3.1.4 All printed circuit modules shall be fully solder masked and shall bear complete silkscreened component legends.
- 3.1.5 All power supply voltages shall be individually fused on each printed circuit module.
- 3.1.6 All power supply voltages shall be individually regulated on each printed circuit module.
- 3.1.7 Input voltages to each module shall be preregulated in order to minimize power dissipation by the on-board regulator.
- 3.1.8 Various system configurations shall be available to suit a variety of applications. Maximum system size shall be at least 1024 inputs by 1024 outputs by 32 levels.
- 3.1.9 It shall be possible to build up a system with less than a full complement of printed circuit modules for the purpose of reducing the input and / or output dimensions of the switching matrix. When so configured, the system shall operate with full performance specifications.
- 3.1.10 Video frames are to be constructed using transmission line techniques. Intra-frame paths shall be on motherboards utilizing balanced impedance-controlled traces. No internal cables shall be utilized in the design of the frame.

- 3.1.11 All paths within each video frame are of equal length (i.e., any input to any output is in time with any other).
- 3.1.12 The Classic series video frame design shall support either analog video routing or digital video routing. A frame is converted from analog to digital routing (or vice versa) by replacing all analog modules with digital modules.
- 3.1.13 A separate DV or HD series frame for serial digital may be attached to and becomes completely compatible with a single control system controlling both analog and serial digital matrices.
- 3.1.14 Microprocessors used in the system shall be of standard configuration and manufacture.
- 3.1.15 Video Input Distribution / Output Switching: No external input distribution or external output secondary switching will be required for Classic systems sized up to 128 x 128, DV series systems up to 256 x 128 and HD systems 32 x 32.
- 3.1.16 Power Supply Fusing: All power supplies are either fused or protected by circuit breaker. Failures are reported via the control system which displays messages on the Configuration Terminal and provides dry contact closure.
- 3.1.17 All frames shall be capable of supporting optional redundant power supplies.
- 3.1.18 Two 75-ohm source terminated outputs shall be provided for each bus.
- 3.1.19 The system shall have deglitch circuits that anticipate the switching commands and take the switched buss to a known DC level.
- 3.1.20 Switch timing shall be software adjustable and shall be factory set to line 10 of the (525 line) vertical interval. In the absence of a reference signal, the trigger pulse generator shall free run and provide random switch timing.
- 3.1.21 Video matrices shall be prewired to accept an optional output monitor printed circuit module in the Classic system, this functionality shall be included standard in the DV series. This option shall provide the capability to directly observe the output signal of any of the output busses.
- 3.1.22 All audio matrices shall include output monitoring standard.
- 3.1.23 The system shall be designed to accept an optional backup control module in a "hot standby" configuration. That is, it shall be ready to assume full control at any time.

### 3.2 WARRANTY

- 3.2.1 The equipment shall be covered by a two year warranty.

### 3.3 SERVICEABILITY

- 3.3.1 The manufacturer shall maintain an inventory of service spares at multiple strategically-located worldwide service centers and shall provide 24-hour emergency service.

- 3.3.2 In addition to schematic diagrams, parts lists, and technical descriptions, the equipment instruction manuals shall include sections on troubleshooting and maintenance. These shall be written so that the procedures outlined can be performed by any competent technician.
- 3.3.3 Module extenders shall provide full access to all board mounted components and shall provide all electrical connections required for functional board testing. For safety reasons, module extenders shall not permit power supplies to be operated outside the frame.
- 3.3.4 Removal / Insertion of Matrix Cards: Non-active matrix cards (those with no signal passing through them) may be removed without degradation or loss of any signals passing through other matrix cards in the system with power applied. Matrix cards may also be inserted into the system without the need to power the system down.

#### 3.4 OPERABILITY

- 3.4.1 Each type of printed circuit module within the frame shall be fully interchangeable with all other modules of the same type. Re-programming via module DIP switches shall not be required when modules are interchanged.
- 3.4.2 Matrix Card Programming: Programming of matrix cards configuration shall be done via a Windows based Configuration Terminal.
- 3.4.3 Video inputs are software selectable on an input-by-input basis as either DC restored or DC coupled.

#### 4.0 PERFORMANCE SPECIFICATIONS

Specifications in this section shall be applicable to Classic systems up to 128x128 operating in either analog NTSC or PAL environments or digital 143Mbit/sec, 177Mbit/sec, 270Mbit/sec, 360Mbit/sec rates, DV series systems at 143Mbit/sec, 177Mbit/sec, 270Mbit/sec, 360Mbit/sec rates, or HD series systems at 1.485Gbit/sec rates. The system shall be fully operational over a temperature range of 0 to 40 Degrees C. and a humidity range of 0 to 90 percent (non-condensing.)

#### 4.1 CONFIGURATION

- 4.1.1 The system shall be compatible with whatever standard, SMPTE or otherwise, emerges as the defacto or common standard for serial digital video routing.

#### 4.2 TECHNICAL SPECIFICATIONS VIDEO

- 4.2.1 Analog input return loss shall be 40 db or greater to 5MHz; and >30dB from 5MHz to 30 MHz.
- 4.2.2 Analog gain scatter shall not exceed +/-0.1dB (measured at 100 KHz for any input to output path.)
- 4.2.3 Analog timing scatter shall not exceed +/-0.6 nsec for any input to one output.

- 4.2.4 Analog frequency response shall be flat within  $\pm 0.10\text{dB}$  over the range of 100KHz to 10MHz. Response from 10 to 30 MHz shall be  $\pm 0.50\text{dB}$ . From 30 MHz to 60 MHz, response shall be  $+0.50\text{dB}$ ,  $-3\text{dB}$ .
- 4.2.5 2T pulse and bar response shall be 0.25% or better for pulse shape, bar slope and pulse-to-bar ratio.
- 4.2.6 Line or field rate tilt (low frequency square wave response) shall not exceed 0.5%.
- 4.2.7 Analog slew rate shall be  $>180\text{V}/\mu\text{s}$ .
- 4.2.8 Analog differential gain shall be no more than 0.15% measured at 1V p-p output over a range of 10-90% APL @ 3.58MHz and 4.43MHz.
- 4.2.9 Analog differential phase shall be no more than 0.15 degree measured at 1V p-p output over a range of 10-90% APL @ 3.58MHz and 4.43MHz.
- 4.2.10 Analog return loss shall be 40dB or greater to 6MHz and no more than 30dB to 30MHz.
- 4.2.11 Analog crosstalk shall be less than  $-60\text{dB}$  at 4.43MHz,  $-35\text{dB}$  at 30MHz. The measurement shall be made by terminating any single input in 75 Ohms (the "friendly" input) and driving all other inputs with 1V p-p phase coherent "hostile" signal. The hostile signal shall be selected on all busses except the one under test. The friendly signal shall then be selected on the test bus and the amplitude of any hostile signal artifacts observed.
- 4.2.12 Analog system signal-to-noise ratio shall be equal to or greater than 75dB over a bandwidth of 5.0MHz (weighted CC1R 567-1).
- 4.2.13 Switching transients shall be suppressed to  $<50\text{mv}$ .
- 4.2.14 The blanking level of analog output video signals shall be 0V  $\pm 50\text{mv}$  except when selecting inputs served by DC coupled modules (due to variances in DC level at the input of DC coupled modules.)
- 4.2.15 Analog output to output isolation shall be greater than 40dB to 5MHz, or 30dB from 5MHz to 30MHz.
- 4.2.16 Analog output return loss shall be  $>40\text{dB}$  to 5MHz and  $>30\text{dB}$  from 5MHz to 30MHz.
- 4.2.17 Analog common mode rejection shall be  $>60\text{dB}$  @ 50/60Hz. The range shall be  $\pm 3\text{V}$ .
- 4.2.18 Analog video inputs shall be capable of handling differential DC of  $\pm 2\text{V}$  for DC restored inputs and  $\pm 50\text{mv}$  for DC coupled inputs.
- 4.2.19 Analog electrical length of the system shall be approximately 40ns for systems  $<128 \times 128$ , and approximately 80ns for systems  $>128 \times 128$ .
- 4.2.20 Classic and DV series digital video systems shall support re-clocked bit rates of 143Mb/sec, 177Mb/sec, 270Mb/sec. and 360Mb/sec. HD series digital video systems shall support re-clocked rates up to 1.485Gbit/sec. Each video input and output may be individually configured via the control system for any of these rates.

- 4.2.21 Classic and DV series digital video systems shall support re-clocking at bit rates of 143Mbit/sec, 177Mbit/sec, 270Mbit/sec, and 360Mbit/sec.
- 4.2.22 HD series digital video systems shall support relocking at bit rates of 1.485Gbit/sec.

#### ANALOG AUDIO PERFORMANCE

- 4.2.23 Common mode rejection ratio shall be greater than 70dB at 50 / 60Hz. Common mode voltage range shall be 40V peak w/+24dBu signals. Transmission Characteristics into high impedance load.
- 4.2.24 Frequency response shall be flat within +/-0dB over the range of 20Hz to 20KHz, and -3.0dB @ 200 KHz.
- 4.2.25 Total harmonic distortion of any frequency between 20Hz and 20KHz shall be less than 0.02% @ +24dBu.
- 4.2.26 Crosstalk shall be less than 100dB from 20Hz to 20KHz. The measurement shall be made in a manner similar to that outlined for video crosstalk.
- 4.2.27 System noise shall be less than 85dBu. (22kHz unweighted, RMS).

#### 4.3 COMMUNICATION AND CONTROL

All matrix control functions, including interface to external control devices, shall be managed by a single controller.

- 4.3.1 Four command bus connections shall be provided, each with its own line driver and receiver. Failure of one of the command buses shall not affect control of the others. Each bus shall control up to 16 panel devices.
- 4.3.2 The command buses shall employ time division multiplex techniques to allow up to 1024 distinct control devices to be connected to the system. The command bus shall operate at greater than 0.9Mbits/sec.
- 4.3.3 Physical connection of a control device to the command bus shall be by means of a loop through path. Control devices shall have only a single BNC connector, making it obligatory to effect the connection with a "Tee" fitting. Thus, it shall not be necessary to break the control loop to remove or replace a control device.
- 4.3.4 All interfaces to the command bus shall incorporate hardware and software interlocks to prevent the accidental transmission of random or spurious data in the event of a control device failure.
- 4.3.5 The command bus shall be designed so that failure of a line driver on a single control device shall not affect the operation of other control devices on the bus.
- 4.3.6 Proper command bus operation shall be possible with as much as 1,500 feet of coax.
- 4.3.7 The system shall provide two dedicated selectable RS-422 / RS-232 serial ports for external control. These ports shall provide terminal control via system-supplied control menus. The ports also support an ASCII message protocol.

- 4.3.8 One RS-422 / RS-232 port also functions as the system configuration port. It is used for initial system configuration (or modification) via system supplied menus.
- 4.3.9 Each matrix frame shall incorporate a node controller to take data from the main controller and switch the matrix. Each frame provides for an optional backup node control module to provide failsafe frame control.
- 4.3.10 The system shall incorporate a coaxial control bus for communication between the main controller and matrix.
- 4.3.11 Each node controller board shall have four RS-485 outputs, each capable of controlling a 32-destination block.
- 4.3.12 Each frame containing a node controller shall have the node controller RS-485 outputs available at the back of the frame so unused nodes can be utilized elsewhere to control other 32-destination blocks.
- 4.3.13 Each frame which does not contain a node controller shall have provisions to utilize an external RS-485 node control inputs to control its full compliment of boards.
- 4.3.14 There shall be no "downtime" during system configuration down loads for control panel or matrix setups.

## 5.0 FUNCTIONAL SPECIFICATIONS AND FEATURES

- 5.0.1 The system shall automatically reconfigure itself after a power outage. There shall be a visual on-board indication when a matrix module is in use (active inputs/outputs passing through it).
- 5.0.2 The system shall give the operator the ability to assign custom source, destination, level and panel names through a Windows based configuration application. There shall be 8 alphabetic characters available for single destination names or 5 alpha and 3 numeric for multi-destination names.
- 5.0.3 The control system shall have the ability to refresh 128 crosspoint salvo in 1 video field.
- 5.0.4 The control system must be able to complete a 128 crosspoint salvo in 1 video field. 256 unique salvo names are available.
- 5.0.5 There shall be battery backup to maintain the system memory during a power outage.
- 5.0.6 The system shall be capable of supporting 32 switching level standards.
- 5.0.7 The control system shall provide for virtual mapping of inputs and outputs in the matrix frame.
- 5.0.8 Changeover from primary to backup controller shall be automatic and not require a separate changeover module.

## SPECIAL PROVISIONS

### SCOPE

The furnishing and delivering a Digital Routing System for the Department of Commerce and Consumer Affairs, Hawaii Public Broadcasting Authority (HPBA), shall be in accordance with these Special Provisions, the attached Specifications, and the General Terms and Conditions dated September 1, 1995, included by reference. Copies of the General Terms and Conditions are available at the State Procurement Office, 1151 Punchbowl Street, Room 416, Honolulu, Hawaii 96813, and on the Internet at <http://www.state.hi.us>.

### CONTRACT ADMINISTRATOR

For purposes of this contract, Mr. Stephen Komori, HPBA Chief Engineer, or his designated representative is named Contract Administrator. Mr. Komori can be reached at telephone number (808) 973-1000.

### OFFEROR'S AUTHORITY TO BID

The State will not participate in determinations regarding an offeror's authority to sell a product. If there is question or doubt regarding an offeror's right or ability to obtain and sell a product, the offeror should resolve that question prior to submitting a offer. If an offeror offers a product that meets specifications and is acceptable and the price submitted is the lowest price bid, the contract will be awarded to that offeror.

### OFFER PREPARATION

Offer Form, Page OF-1. Offeror is requested to submit its offer using offeror's exact legal name as registered with the Department of Commerce and Consumer Affairs, if applicable; and to indicate exact legal name in the appropriate space on Offer Form, page OF-1. Failure to do so may delay proper execution of the contract.

Offeror's authorized signature shall be an original signature in ink. If Offer Form, page OF-1, is unsigned or the affixed signature is a facsimile or a photocopy, the offer shall be automatically rejected unless accompanied by other material, containing an original signature, indicating the offeror's intent to be bound.

Bid Price. Bid price shall be based on delivery to destination and shall include transportation, freight charges, all applicable taxes and all other costs incurred. Bid price shall be the all-inclusive cost to the State and no other charges will be honored. Offeror must make an offer on all items to be considered for award.

Offer Guaranty. An offer security deposit is not required for this solicitation. Refer to Section 2.6 of the General Terms and Conditions.

Tax Clearance. An **original or certified copy** of a tax clearance certificate issued by the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS) must be submitted with offeror's sealed offer by the due date and time.

The tax clearances from DOTAX and IRS shall be obtained on the attached one-page, two-sided **Tax Clearance Application (Form A-6, Rev.1998)** which is accompanied by Instructions that offerors should carefully read. Effective March 1, 1998, only this revised Form A-6 will be accepted by DOTAX and IRS.

Out-of-state offerors should mail their application to DOTAX's Oahu District Office.

Effective 12/1/97 tax clearance certificates are valid for a **six-month** (not 180 day) period beginning on the later dated DOTAX or IRS approval stamp. For example, a 12/15/97 certificate is valid through 6/15/97.

The tax clearance submitted with the sealed offer must be valid on the solicitation's legal ad date or any date thereafter up to the offer due date. A valid tax clearance received with the offer will remain valid for the contract award.

**For the purpose of this solicitation the State Procurement Office will accept the attached completed SPO Form TEMP B, "Certification for Tax Clearance" in place of the DOTAX Form A-6 (Rev.1998), if offeror is unable to obtain a tax clearance certificate in time for submittal with the sealed offer. However, the successful offeror is required to submit a tax clearance certificate prior to award.**

NOTE: The above tax clearance requirement is in addition to the existing requirement for final payment. Refer to the special provisions on INVOICING below for information on the tax clearance requirement for final payment.

Tax Liability. The following information is provided to assist vendors in determining their tax liability under this solicitation. For additional information and assistance, bidders may call the State of Hawaii Department of Taxation, telephone (800) 222-3229 or (808) 587-1455.

The "State of Hawaii Information on Hawaii State Taxes Administered by the Department of Taxation", Publication 1 (November 1993) is included herein.

Hawaii Vendors. A vendor doing business in the State of Hawaii, as evidenced by its Hawaii general excise tax (GET) license, is liable for the Hawaii GET, currently 4%, and applicable use tax, currently 1/2%, resulting from this solicitation.

Out-of-State Vendors. If an out-of-state vendor does not possess a Hawaii GET license, but has "sufficient presence in Hawaii", then such vendor is advised that the gross receipts derived from this solicitation are subject to the GET imposed by Chapter 237, Hawaii Revised Statutes (HRS), at the current 4% rate, and the use tax imposed by Chapter 238, HRS, at the current 1/2% rate.

To determine whether an out-of-state vendor not possessing a Hawaii GET license has "sufficient presence in Hawaii" and therefore subject to the taxes, vendor shall complete and submit with their offer, the attached Tax Equalization Certificate. Failure to complete the certificate may result in rejection of the offer or application of the tax equalization provision.

Tax-Exempt Vendors. If an offeror is a person exempt by the HRS from paying the GET and use tax and therefore not liable for the taxes under this solicitation, offeror shall state its tax exempt status and cite the HRS chapter or section allowing the exemption.

Tax Equalization Provision. For evaluation purposes, pursuant to Section 103-53.5, HRS, as amended, the price offer submitted by an offeror not liable for the GET and use tax under this solicitation, shall be increased by the current rates of the GET and the use tax. Under no circumstance shall the dollar amount of the award include the aforementioned adjustment.

Brand Name and Model No. Offeror must identify on the Offer Form the exact brand or manufacturer name and product model number, order number or other identifier of the equipment specified herein. Failure to do so of the inclusion of remarks such as "as specified" may be sufficient grounds for rejection of bid. If any of the called for elements or product information are missing from the offer, the State will be unable to determine from the information given whether the product is acceptable or not.

No offeror will be allowed to clarify product identification after bid opening. This is to ensure that all bids are submitted under the same conditions with no opportunity for one offeror to have an advantage over any other offeror after exposure of offers.

Any alteration(s) or modification(s) made to the model(s) offered shall be identified by the offeror. Offeror shall ensure that full product warranty/guarantee shall apply to altered or modified model(s).

Brochures and/or Specifications Literature. The burden of proof as to the quality and suitability of the equipment offered to the specifications stated herein is on the offeror. Accordingly, offeror shall submit brochures and/or specifications literature verifying that the equipment offered conforms to the specifications. If and when requested, offeror shall at his own expense, within seven (7) calendar days from date of State's request, furnish any additional information necessary or relating thereto, and/or exact sample of the equipment being considered for award. The State will be the sole judge as to the comparative quality and suitability of the equipment offered and its decision will be final.

#### **METHOD OF AWARD**

Award, if made, shall be to the responsible and responsive offeror submitting the lowest total sum bid. Offeror must submit an offer for all items to be considered for award.

#### **CONTRACT EXECUTION**

For contract award over \$25,000, the State shall forward a formal contract to the successful offeror for execution. The contract shall be signed by the successful offeror and returned within ten (10) days after receipt by the vendor as specified in Section 3.3 of the General Terms and Conditions. No performance or payment bond is required.

#### **QUALITY OF EQUIPMENT**

Equipment furnished under these specifications shall be new, the best quality of its respective kind. Equipment shall be free from defects which may render it unfit for use. Damaged or rejected items shall be immediately replaced with items of the quality required by these specifications.

Equipment offered shall include any other standard features not listed herein but detailed in manufacturer's brochures or specifications literature and deemed necessary for the proper and safe operation of the equipment.

Failure to replace any rejected items shall not relieve Contractor from the responsibility imposed upon him by the contract.

No payment, whether partial or final, shall be construed to be an acceptance of defective materials.

The State may, at any time by written order, stop any work or delivery of specific products not conforming to these specifications. Such stop order shall not relieve the Contractor of his obligation to complete his contract within the contract time limits, nor shall it in any way terminate, cancel or abrogate the contract or any part thereof.

## **WARRANTY**

Equipment furnished shall be fully guaranteed by the Contractor following acceptance of proper operation on parts and labor against defects resulting from the use of defective or inferior materials or from negligent workmanship or against all design and manufacturing defects. Warranty period shall begin from the date equipment is accepted and placed in service. Warranty documents shall be delivered with equipment and shall detail manufacturer's obligation and warranty procedures. Contractor shall replace or repair defective material and/or workmanship at no cost to the State for parts and labor during the warranty period, provided such defects are not due to abuse or negligence on the part of the State.

All of the contractor's or manufacturer's usual warranties shall become a part of the contract, except that the terms and conditions of the contract shall prevail in cases of conflict.

## **DELIVERY**

Contractor shall coordinate all delivery details with:

Hawaii Public Broadcasting Authority  
2350 Dole Street  
Honolulu, HI 96822

Attn: Mr. Stephen Komori  
Telephone: (808) 973-1000

Delivery shall be completed within sixty (60) calendar days from the Notice to Proceed date.

## **DELIVERY EXTENSION**

Contractor shall complete delivery and installation within the time specified in the contract. However, Contractor shall not be held responsible for the delay provided he notifies the procurement officer in accordance with General Terms and Conditions Section 4.4, Delivery Extensions.

## **LIQUIDATED DAMAGES**

Refer to Section 6.12 of the General Terms and Conditions. Liquidated damages is fixed at the sum of FIFTY DOLLARS (\$50.00) for each and every calendar day the Contractor delays in the completion of any item per order of his contract after the required date of said completion.

## **INVOICING**

Invoices, original and three (3) copies, shall be sent to the above delivery address.

A tax clearance certificate must accompany the invoice for final payment and shall be an original or certified copy, not over two-months old.

## **PAYMENT**

Section 103-10, HRS, provided that the State shall have thirty (30) calendar days after receipt of invoice or satisfactory delivery of goods, or performance of the services, to make payment. For this reason, the State will reject any bid submitted with a condition requiring payment within a shorter period. Further, the State will reject any bid submitted with a condition requiring interest payments greater than that allowed by Section 103-10, HRS, as amended.

The State will not recognize any requirement established by the Contractor and communicated to the State after award of the contract, which required payment within a shorter period or interest payment not in conformance with statute.

## ADDITIONS AND EXCEPTIONS TO THE GENERAL TERMS AND CONDITIONS

Approvals. Any agreement arising out of this offer is subject to the approval of the Department of the Attorney General as to form, and to all further approvals, including the approval of the Governor, required by statute, regulation, rule, order, or other directive.

Cancellation of Solicitations and Rejection of Offers. The solicitation may be cancelled or the offers may be rejected, in whole or in part, when in the best interest of the purchasing agency, as provided in Sections 3-122-95 through 3-122-97, Hawaii Administrative Rules.

Provisions from the General Terms and Conditions Not Applicable. Sections 2.11 and 2.14 of the General Terms and Conditions which apply specifically to the Request for Proposals method of source selection are not applicable to Invitation for Bids. Also Sections 2.10 and 2.13 which apply specifically to the Invitation for Bids method of source selection are not applicable to Requests for Proposals.

Records Retention. The Contractor and any subcontractors shall maintain the books and records that relate to the Agreement and any cost or pricing data for three (3) years from the date of final payment under the Agreement.

Preparation of Offer. General Terms and Conditions Section 2.5, paragraph four, is rescinded and replaced with the following:

"An offeror may submit only one offer in response to a solicitation. If an offeror submits more than one offer in response to a solicitation, then all such offers shall be rejected. Similarly, an offeror may submit only one offer for each line item (if any) of a solicitation. If an offeror submits more than one offer per line item, then all offers for that line item shall be rejected."

Preference for Hawaii Products. General Terms and Conditions Section 3.1(B), paragraphs one and two only are rescinded and replaced with the following: "A purchasing agency shall review all specifications in a bid or proposal for purchase from the Hawaii products list where these products are available; provided that the products: Meet the minimum specifications and the selling price f.o.b. jobsite; unloaded, including applicable general excise tax and use tax, does not exceed the lowest delivered price in Hawaii f.o.b. jobsite; and unloaded, including applicable general excise tax and use tax, does not exceed the lowest delivered price of a similar non-Hawaii product by more than: three per cent where class I Hawaii products are involved; five per cent where class II Hawaii products are involved; or ten per cent where class III Hawaii products are involved."

All persons submitting bids or proposals to claim Hawaii products preference shall designate in their bids which individual product and its price is to be supplied as a Hawaii product.

Where a bid or proposal contains both Hawaii and non-Hawaii products, then for the purpose of selecting the lowest bid or purchase price only, the price bid or offered for a Hawaii product item shall be decreased by subtracting therefrom: three per cent, five per cent, or ten per cent for the class I, class II, or class III Hawaii product items bid or offered, respectively. The lowest total bid or proposal, taking the preference into consideration, shall be awarded the contract unless the bid or offer provides for additional award criteria. The contract amount of any contract awarded, however, shall be the amount of the bid or price offered, exclusive of the preferences."

Printing Preference. General Terms and Conditions Section 3.1(C), paragraphs one and two are rescinded and replaced with the following: "All bids or proposals submitted for a printing, binding, or stationery contract in which all work will be performed in-state, including all preparatory work, presswork, bindery work, and any other production-related work shall received a fifteen per cent preference for purposes of bid or proposal evaluation."

Where bids or proposals are for work performed in-state and out-of-state, then for the purpose of selecting the lowest bid or evaluating proposals submitted only, the amount bid or proposed for work performed out-of-state shall be increased by fifteen per cent. The lowest total offer, taking the preference into consideration, shall be awarded the contract unless the solicitation provides for additional award criteria. The contract amount awarded, however, shall be the amount of the price offered, exclusive of the preference."

Bond Forms. The bond forms, Exhibits B through H, are replaced by the forms issued by the Procurement Policy Board Directive No. 1997-01, dated November 12, 1997, included herein by reference and made a part hereof. Copies of the bond forms are available at the State Procurement Office, 1151 Punchbowl Street, Room 416, Honolulu, Hawaii 96813.

**TAX EQUALIZATION CERTIFICATE**

SUBJ: Offer No.: IFB/RFP-\_\_\_\_\_

Description: \_\_\_\_\_

\_\_\_\_\_  
(To be filled in by prospective offeror)

Out-of-State offerors not possessing a Hawaii General Excise Tax (GET) license must answer all questions:

	<u>Yes</u>	<u>No</u>
	(check	only
	one)	
1. Does your business have an office, inventory, property, employees, or other representation in the State of Hawaii (hereinafter SOH)?	_____	_____
2. Does the contract to be awarded require your business to have an office, inventory, property, employees, or other representation in the SOH?	_____	_____
3. Does your business provide services in conjunction with the sales of property, such as training, installation, or repairs in the SOH?	_____	_____
4. Will your business provide any services in the SOH under the contract to be awarded?	_____	_____*

\*If the entire services are to be subcontracted, subject to the State's approval, provide the names of the subcontractor(s):

\_\_\_\_\_  
If you answered "Yes" to any question, then you have sufficient presence in the State and are advised that the gross receipts derived from this solicitation are subject to the GET imposed by Chapter 237, HRS, at the current 4% rate, and where applicable to tangible property imported into the SOH for resale, subject to the current 1/2% use tax imposed by Chapter 238, HRS.

If you answered "No" to all questions, then the tax equalization provision described in Section 103-53.5, HRS, applies to you.

Offeror \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_